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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/678,997 | 10/03/2003 | Albert James Yovichin | DN2003169 | 8922 |

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THE GOODYEAR TIRE & RUBBER COMPANY
INTELLECTUAL PROPERTY DEPARTMENT 823
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AKRON, OH 44316-0001

EXAMINER

MACKEY, JAMES P

ART UNIT PAPER NUMBER

1722

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/678,997

Applicant(s)

YOVICHIN ET AL.

Examiner

James Mackey

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 11-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-15 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/3/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Art Unit: 1722

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-10, drawn to an annular mold, classified in class 425, subclass 47.
 - II. Claims 11-14, drawn to a method of molding an annular belt, classified in class 264, subclass 326.
 - III. Claim 15, drawn to a tread belt, classified in class 152, subclass 209.6.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions of Group II and Group I are related as process and apparatus for its practice.

The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another and materially different process such as molding rubber not having a reinforcing belt.

3. Inventions of Group I and Group III are related as apparatus and product made. The inventions in this relationship are distinct if either or both of the following can be shown: (1) that the apparatus as claimed is not an obvious apparatus for making the product and the apparatus can be used for making a different product or (2) that the product as claimed can be made by another and materially different apparatus (MPEP § 806.05(g)). In this case the product as claimed can be made by another and materially different apparatus such as an injection mold or a mold having an internal bladder instead of inner segments.

4. Inventions of Group II and Group III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as

Art Unit: 1722

claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different process such as forming the belt by injection molding or using a mold having an internal bladder instead of inner segments.

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, and because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

6. During a telephone conversation with June Rickey on 14 September 2005 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-10. Affirmation of this election must be made by applicant in replying to this Office action. Claims 11-15 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

8. Applicant should update the Title to reflect the elected invention, i.e. apparatus only.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1722

10. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 7-9 are indefinite in that the claim recitations relate the apparatus structure to the contents of the apparatus during its intended use, and therefore the metes and bounds of the claimed subject matter cannot be determined; in other words, since the claims relate the location of apparatus structure relative to the desired contents of the apparatus during its intended use, the scope of the claimed apparatus is indefinite because the apparatus structure cannot be clearly defined when the apparatus is empty, and also cannot be clearly defined without reference to the desired contents of the claimed apparatus during its intended use (note that purpose to which apparatus is to be put and expression relating apparatus to contents thereof during intended operation are not significant in determining patentability of an apparatus claim, *Ex parte Thibault*, 164 USPQ 666). Claims 2-5 are indefinite due to their dependence on indefinite claim 1.

Claims 4 and 5 are similarly indefinite, in that the claim recitations relate the apparatus structure to the contents of the apparatus during its intended use, and therefore the metes and bounds of the claimed subject matter cannot be determined.

In claim 3, line 1, “the radially outer **mold** segments” lacks proper antecedent basis in the claim.

In claim 5, line 4, “above” is indefinite as to exactly where “above” is located relative to the other structural elements of the claimed apparatus (and especially the inner and outer segments); and “cross ply layer” lacks clear antecedent basis in the claim.

Art Unit: 1722

In claim 6, line 8, “the respective hub” should be --the respective hub portion-- for clarity; lines 8-9, “each circumferentially adjacent segment” is indefinite as to whether this refers to the inner or outer segments; line 9, “either an upper or lower hub” is indefinite as to how this relates to the hub portions previously recited (the phrase should apparently read --either the upper or lower hub portion--); line 10, “one hub” should be --one of the hub portions-- for clarity; and line 11-12, “the lower and upper hub” should be --the lower and upper hub portions-- for clarity.

In claim 7, line 3, the quote marks are unnecessary and should be deleted (note the unquoted J frame as recited in claim 8); and line 3, “slide” lacks proper antecedent basis in the claim (it appears that it should read --said--).

Claim 8 is indefinite in that the claim depends from itself (for purposes of examination, it will be assumed that claim 8 should depend from claim 7). Further in claim 8, line 4, “linear bearing rolls” should apparently be --linear bearing rails--, as recited on line 5 of the claim.

Claim 9 should apparently depend from claim 8 in order to provide proper antecedent basis for “the linear bearing blocks”.

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Brown (U.S. Patent 2,381,395; Figures 1-11).

Art Unit: 1722

Brown teaches a segmented annular mold comprising a plurality of radially movable and outwardly expandable inner segments 29, 37 each having upper and lower lateral edge forming portions extending outwardly to a parting line (as clearly shown in Figures 8-11), and a plurality of radially movable and contracting outer segments 24 each having upper and lower lateral edge forming portions extending inwardly to the parting line (as clearly shown in Figures 8-11). The mold of Brown is inherently capable of being used to vulcanize an annular tread or track including a reinforcing belt structure positioned radially inwardly of the parting line. Note that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations, *Ex parte Masham*, 2 USPQ2d 1647; purpose to which apparatus is to be put and expression relating apparatus to contents thereof during intended operation are not significant in determining patentability of an apparatus claim, *Ex parte Thibault*, 164 USPQ 666; the manner or method in which a machine is to be utilized is not germane to the issue of patentability of the machine itself, *In re Casey*, 152 USPQ 235.

13. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Fike (U.S. Patent 6,177,042; Figures 8-10).

Fike '042 teaches a segmented annular mold comprising a plurality of radially movable and outwardly expandable inner segments N, W each having upper and lower lateral edge forming portions extending outwardly to a parting line (as clearly shown in Figures 8-10), and a plurality of radially movable and contracting outer segments 72 each having upper and lower lateral edge forming portions extending inwardly to the parting line (as clearly shown in Figures 8-10). The mold of Fike '042 is inherently capable of being used to vulcanize an annular tread

Art Unit: 1722

or track including a reinforcing belt structure positioned radially inwardly of the parting line.

Note that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations, *Ex parte Masham*, 2 USPQ2d 1647; purpose to which apparatus is to be put and expression relating apparatus to contents thereof during intended operation are not significant in determining patentability of an apparatus claim, *Ex parte Thibault*, 164 USPQ 666; the manner or method in which a machine is to be utilized is not germane to the issue of patentability of the machine itself, *In re Casey*, 152 USPQ 235.

14. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Satzler (U.S. Patent 4,207,052; Figures 1-4).

Satzler teaches a segmented annular mold comprising a plurality of radially movable and outwardly expandable inner segments 14, 16 each having upper and lower lateral edge forming portions extending outwardly to a parting line (as clearly shown in Figures 3-4), and a plurality of radially movable and contracting outer segments 106 each having upper and lower lateral edge forming portions extending inwardly to the parting line (as clearly shown in Figures 3-4). The mold of Satzler is inherently capable of being used to vulcanize an annular tread or track including a reinforcing belt structure positioned radially inwardly of the parting line. Note that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations, *Ex parte Masham*, 2 USPQ2d 1647; purpose to which apparatus is to be put and expression relating apparatus to contents thereof during intended operation are not significant in determining patentability of an apparatus claim, *Ex parte Thibault*, 164 USPQ 666;

Art Unit: 1722

the manner or method in which a machine is to be utilized is not germane to the issue of patentability of the machine itself, *In re Casey*, 152 USPQ 235.

15. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Pacciarini et al. (U.S. Patent 3,358,330; Figures 3-6).

Pacciarini et al. teach a segmented annular mold comprising a plurality of radially movable and outwardly expandable inner segments 25-28 each having upper and lower lateral edge forming portions extending outwardly to a parting line (as clearly shown in Fig. 3), and a plurality of radially movable and contracting outer segments 14 each having upper and lower lateral edge forming portions extending inwardly to the parting line (as clearly shown in Fig. 3). The mold of Pacciarini et al. is inherently capable of being used to vulcanize an annular tread or track including a reinforcing belt structure positioned radially inwardly of the parting line. Note that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations, *Ex parte Masham*, 2 USPQ2d 1647; purpose to which apparatus is to be put and expression relating apparatus to contents thereof during intended operation are not significant in determining patentability of an apparatus claim, *Ex parte Thibault*, 164 USPQ 666; the manner or method in which a machine is to be utilized is not germane to the issue of patentability of the machine itself, *In re Casey*, 152 USPQ 235.

16. Claims 6-10 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

The prior art of record does not teach or fairly suggest a segmented annular mold comprising a plurality of outer forming segments, a plurality of radially movable and outwardly

Art Unit: 1722

expandable inner forming segments, and a slidable hub assembly including a central shaft, upper and lower hub portions each slidably mounted onto the central shaft, and means for independently moving the hub portions, wherein each hub portion having a plurality of linkage arms pivotably connected to the respective hub portion and the inner segments, each circumferentially adjacent inner segment being connected to either the upper or lower hub portion in an alternating pattern such that movement of the upper and lower hub portions into interlocking alignment moves the inner segments to form an annular ring, as claimed in claim 6.

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

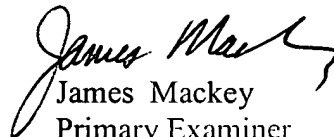
Schleiger (U.S. Patent 4,263,083; Figures 3-7) discloses a segmented annular mold wherein the parting line between the inner segments (having lateral edge forming portions 40, 85) and the outer segments is located radially outwardly of a reinforcing structure in the belt being cured.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Mackey whose telephone number is 571-272-1135. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1722

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


James Mackey
Primary Examiner
Art Unit 1722

11/14/05

jpm
November 14, 2005